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THREE-COURSE THREE-TERM CALENDAR AND SCHEDULE CHANGES

BY PROFESSOR ROBIN ROBINSON

NOTE: At intervals, according to the interest of undergraduates in questions of College policy, the Undergraduate Journal is published by the Secretary's Office conveying accurate and complete information to all members of the student body, and copies of the Journal are also mailed to the faculty. In these cases, the responsible officer of the College (in the past including President Dickey, the Deans, Professor Ryder on the work of the Commission on Campus Life, or others) also appears on campus radio station WDCR and his comments are made fully available to the student press.

Author of the following explanation of the principles of the new calendar, to become effective with the fall term next September, and full information on the scheduling of classes for the year 1957-58, is the Associate Registrar of the College, Professor Robin Robinson. He served as a member of the committee headed by Professor Diller* appointed by action of the faculty last March to study schedule and calendar questions and to report back to the faculty. This was done, and at a special meeting of the faculty called for this purpose, the committee's recommendations were adopted by vote of the faculty and, therefore, became effective for the coming year.

Professor Robinson served the committee as expert on scheduling matters. He has taught mathematics at Dartmouth since 1928. As Associate Registrar, he is the officer of the College most concerned with academic scheduling for the coming year, and we believe that everyone concerned will welcome his authoritative and full presentation of the facts.

As is now well-known to Dartmouth men, the Dartmouth College Faculty has adopted a new educational program for the college, to go into effect in September 1958, which involves as one of its vital components a change to a three-term, three-course calendar. The principal advantage of this provision is that a student will be concentrating his attention on substantially fewer subjects in any one term, thus allowing him to achieve greater continuity, penetration, and effectiveness in the courses he elects. The heart of the program is the three-course feature; the three-term calendar permits the three-course feature to be carried out without drastic reduction of the total number of courses required for the degree, as well as paying certain extra dividends by placing the Christmas and spring recesses between terms.

The purpose of this report to the student body is to explain the details of the calendar and schedule adopted by the Faculty as a framework for the realization of this educational program. It is not my intention to discuss here matters of educational policy as such, but since the motivation for the calendar and schedule lies in the program itself, the brief statement in the preceding paragraph seems essential.

The Annual Calendar

Early in the course of the discussions of the Committee on Educational Policy, I was asked to report on the feasibility of a calendar based on three terms of ten weeks each plus examination periods, with provision for Christmas and spring recesses and Commencement week, and a summer vacation of such length as to permit the introduction of a fourth term of normal duration in the summer if it should at some later time prove desirable. The fact that the three-term calendar was adopted is evidence that the Committee on Educational Policy and later the Faculty deemed it feasible, though with certain very definite restrictions in detail.

On the surface, the problem of arranging four ten-week terms, each followed by a one-week examination period and a two-week recess, seems simple, since these add to fifty-two weeks. But actually this computation ignores athletic holidays including Carnival, ignores Thanksgiving recess, and fails to take into account the need for a longer recess at Christmas to permit scholarship students to take Christmas jobs, and a longer recess at Commencement to permit college facilities to be used by parents of seniors and returning alumni. In addition, such scheduling would place Commencement so late in June as to hamper summer employment of students and proper operation of college facilities during the reunion period, and would push the hypothetical summer term beyond Labor Day. On close study it became evident, however, that with slight reductions in the lengths of the second and third terms, and more substantial reductions in the lengths of examination periods, the problem could be solved without encroaching on the between-terms vacations which faculty sentiment indicated should be each of at least two weeks duration.

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*Full membership and consultants for the Diller Committee were, in addition to Professor Diller (chairman) and Professor Robinson: Professors William W. Ballard and John G. Gazley, and Dean McDonald. The consulting members who met with the committee were Irving C. Smith representing DCAC; Warner Bentley of COSO; Sidney C. Hayward, Secretary of the College; Richard W. Olmsted, Business Manager; John A. Rand, Outing Club; Richard Schramm '57, president of the Undergraduate Council; and Joseph B. Blake '58, president of Green Key. The Committee on Educational Policy was asked to have a representative at each meeting.

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The present examination periods are nine days in length, not so much because this time is essential for spreading out a student's five or six examinations, as because the practice of giving course-wide examinations in all multiple-section courses creates opportunities for conflict which have to be avoided. If all final examinations were scheduled without this practice, no more periods would be required (assuming an adequate supply of examination rooms) than the number of hours at which classes are scheduled, because a student cannot possibly have a conflict of examinations at an hour at which, say, only MWF 10 o'clock classes have their finals, for he cannot possibly be taking two such courses. Careful study of this problem has indicated that an examination period of 3-1/2 days (14 periods) will suffice for each of the new terms; to achieve this it will be necessary to abandon the guarantee that a single final examination shall be given in every course, though a course-wide examination will be possible in freshman English, in elementary language courses, and in some other multiple-section courses. The obvious drawback to the instructor of having additional question papers to prepare would seem to be a fair price to pay for the obvious advantages of an adequate college recess, important both to teachers and to students.

It does not seem feasible to schedule "reading periods" of substantial length, but every effort will be made to arrange examination periods to follow weekends, or in other ways to provide preparation time free from class engagements. This more restricted reading period may need to be re-examined in the light of future experience with the new curriculum.

With these considerations in mind, you are invited to examine the calendar for the year 1958-1959. The approximate amounts of time devoted to terms, examination periods, and recesses (including athletic holidays) are as follows:

Fall term	10.0	weeks	(40 meetings)
Winter term	9.75	"	(39 ")
Spring term	9.5	"	(38 ")
Examination periods (3)	1.75	"	
Athletic holidays (3)	0.75	"	
Thanksgiving recess	0.5	"	
Christmas recess	3.0	"	
Spring recess	2.0	"	
Commencement recess (hypothetical)	2.5	"	
Summer term (hypothetical)	9.5	"	(38 meetings)
Examination period (hypothetical)	0.5	"	
September recess (hypothetical)	2.75	"	

These figures add to 52.5 weeks because the fall term in 1959 will begin one-half week later than in 1958. The individual figures will vary slightly from year to year, but the basic pattern will be preserved. Some of the special features of this calendar can better be appreciated after an exposition of the weekly schedule.

Calendar for 1958-59

	S	M	T	W	T	F	S	
Sep.	7	8	9	10	11	12	13	
	14	15	16	17	18	19	20	Registration, Sept. 20
	21	22	23	24	25	26	27	Convocation, Sept. 22
	28	29	30	1	2	3	4	
Oct.	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	Athletic holiday
	26	27	28	29	30	31	1	
Nov.	2	3	4	5	6	7	8	Athletic holiday
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	Thanksgiving recess
	30	1	2	3	4	5	6	
Dec.	7	8	9	10	11	12	13	EXAMS I
	14	15	16	17	18	19	20	
	21	22	23	24	25	26	27	Christmas recess
	28	29	30	31	1	2	3	
Jan.	4	5	6	7	8	9	10	Registration, Jan. 4-5
	11	12	13	14	15	16	17	
	18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	
Feb.	1	2	3	4	5	6	7	Winter Carnival
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	
Mar.	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	EXAMS II
	22	23	24	25	26	27	28	Spring recess
	29	30	31	1	2	3	4	Registration, Apr. 1-2
Apr.	5	6	7	8	9	10	11	
	12	13	14	15	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	1	2	
May	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	
	31	1	2	3	4	5	6	Comprehensive exams
June	7	8	9	10	11	12	13	EXAMS III
	14	15	16	17	18	19	20	Commencement Day and Alumni Week
	21	22	23	24	25	26	27	
	28	29	30	1	2	3	4	

September 20	Saturday	Registration of upperclassmen
September 22	Monday	Convocation 8:45 a.m. First classes 10 a.m.
October 25	Saturday	Athletic holiday begins Friday 11 a.m.
November 8	Saturday	Athletic holiday begins Friday 3 p.m.
November 26	Wednesday	Thanksgiving recess begins 1 p.m.
December 1	Monday	Thanksgiving recess ends 8 a.m.
December 8-12	Monday-Friday	First term examinations
	CHRISTMAS RECESS	
January 4-5	Sunday-Monday	Registration closes Monday 10 a.m.
January 5	Monday	First classes 10 a.m.
February 7	Saturday	Carnival holiday begins Friday 11 a.m.
March 16-19	Monday-Thursday	Second term examinations
	SPRING RECESS	
April 1-2	Wednesday-Thursday	Registration closes Thursday 10 a.m.
April 2	Thursday	First classes 10 a.m.
May 30	Saturday	Last day of classes for seniors
June 1-5	Monday-Friday	Comprehensive examinations
June 5	Friday	Last day of classes
June 6-10	Saturday-Wednesday	Third term examinations begin 1:30 p.m.
June 12	Friday	Class Day
June 14	Sunday	Commencement Day
June 15-21	Monday-Sunday	Class Reunion Week - Hanover Holiday - Alumni Council meetings

The Weekly Schedule

A second problem on which I was asked to report to the Committee on Educational Policy was the feasibility of a weekly schedule, in which each student would take three courses, each meeting four times weekly, arranged in such a way as to make less likely the sort of crowding which the new educational program is designed to avoid. Since an extra course will be required of first-term freshmen (I & C) and of seniors (G I), and since ROTC upperclassmen will sometimes be taking still another extra course, care must be exercised to prevent too large a share of courses from meeting on any one day.

My report to the Committee indicated my conviction that a suitable weekly schedule could be set up for either a six-day or a five-day week, insofar as

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that schedule applied to lectures and classes. It was my first reaction that the five-day week was particularly suitable. But there were definite doubts about the possibility of scheduling laboratory periods without use of Saturday mornings, and the problem of the chapel period presented certain difficulties. In addition the Division of the Sciences voted unanimously to request that provision for hour examinations be made outside of class hours, in order not to sacrifice class meetings, which were already reduced in number, particularly in the second and third terms. Since late afternoon and evening hours now used for this purpose are already quite inadequate for the large courses, hope of fulfilling this request depended on finding these hours earlier in the day.

With these technical considerations pointing to the greater adaptability of the six-day week, the Faculty voted for the creation of an ad hoc committee to bring in a report on the relative merits of the five-day and six-day weeks.

In the committee other non-technical considerations soon made themselves felt, as representatives of different spheres of college activity reported on their own problems. Among these problems were to be found those faced by certain athletic and extracurricular activities, which count heavily on practice and rehearsal time early in the week and game and performance time on weekends. These worthwhile activities would be seriously hampered, because participants would often be away on long weekends, and between weekends would be too busy. Friday nights would become undesirable for the scheduling of plays, lectures, concerts, and similar events, with consequent further crowding in earlier parts of the week. In some activities this situation might conceivably spell the end of effective programs, but in any case the character of the College as a residential academic community would be adversely affected.

One consideration which seemed very persuasive was the theory behind the new program, that the education of the student should have greater continuity than in the past, with a time-table less taken up with flitting rapidly from one subject to the next. This theory did not seem consistent with a plan in which it is possible for a student to crowd both his studies and his extracurricular activities into a minimum period, and then to separate himself from the community for a period approximating 40% of the week (40% of 168 hours is equivalent to the period from Friday noon to Monday morning). It was difficult to see how either the studies or the other activities could fail to be adversely affected.

One point was brought out by the Committee on Educational Policy - the danger of introducing an extraneous variable such as the five-day week at the same time as a significant curricular change, thereby making it more difficult to assess the strengths and weaknesses of the new program as they appear.

An admitted weakness of the present schedule is the problem faced by the teacher who finds his Saturday classes more than decimated by absenteeism. Many of the Faculty have found this situation well-nigh insupportable, and have come to the conclusion that the situation must change radically either one way or the other - either by turning to the five-day week or by taking steps to assure better Saturday attendance. Since the committee members were all but unanimous in finding the adoption of the five-day week out of keeping with the educational aims of the college as well as unmanageable, they refused to assume that nothing could be done to improve the possibility of making Saturday classes more effective, and, in essence, recommended that Saturday should be regarded as an essential day of the weekly schedule, just as Monday or Wednesday or any other weekday is, except of course that Saturday afternoons should be kept free as in the past.

Once this decision as to the six-day week was taken, it became my task to present a weekly schedule incorporating the principle I have just mentioned, and providing for the other features outlined earlier. A man taking three courses, each meeting four times weekly, would have twelve class appointments, which ideally should occur twice daily. To obtain this, approximately two-thirds of all classes should meet each day. Since it seems feasible to schedule seven class periods (8, 9, 10, 11, 12, 1, 2), this means four or five of them should be held daily, usually five, if class appointments are not to be allowed to bunch on any one day. Since two afternoons each week must be held free of substantial class obligations - the traditional Saturday afternoon and one other afternoon for ROTC drill periods - it is clear that on each of these days the morning hours must be fully utilized to provide for that day's proportionate share of class engagements. If one effect of this should be to bring about greater election of afternoon classes, this would be a distinct gain, for the currently "less popular" class hours will have to be utilized more fully if available classrooms are to be adequate for morning class assignments.

A further consideration in the arrangement of class meetings is the necessity for pairs of successive hours following the same pattern, since a number of courses (such as Botany 1, Zoology 1, Engineering 1) require two-hour periods. The pairings 8-9, 11-12, 1-2 were almost obligatory, since at the suggestion of the Committee on Educational Policy it is planned to use the 10 o'clock hour as widely as possible (though by no means exclusively) for large lecture courses commonly used to fulfill distributive requirements. (Government 1, Mathematics 3, and Religion 1 come to mind as such courses.)

At this point it begins to be apparent that a definite pattern has emerged, though there are still several degrees of freedom in the way it is carried out in detail. Two further considerations now enter the picture. First, the classes for any one hour should be arranged if possible so as not to utilize three successive days, as this would tend to crowd assignments for such a class too heavily into one part of the week. It will be seen that the available symmetric patterns having these characteristics are MT-TF-, M-WT-S, and -TW-FS, and the first of these is the unique such pattern appropriate to afternoon classes. (The unsymmetric patterns M-W-FS and MT-T-S present certain difficulties in meshing with other patterns, and tend to produce too much bunching of classes on Monday.) The second consideration is that the courses should pass through one cycle of classes before starting a second. This is partly in the interest of avoiding confusion, but also to hold to a minimum the setting up and taking down of apparatus for class demonstration.

We have now reached the stage where the class schedule diagram is practically determined by the conditions.

M	T	W	T	F	S
	8	8		8	8
	9	9		9	9
10		10	10		10
11		11	11		11
12		12	12		12
1	1		1	1	
2	2		2	2	

It seems desirable to have the 10 o'clock pattern conform to that of an adjacent hour, since that affords still another opportunity for scheduling two-hour classes. The pattern leaving Tuesday free is chosen, because it provides a convenient hour for I & C and G I discussion periods.

The remaining free hours are now available for two purposes: (a) To provide hours for morning chapel, and (b) to provide flexibility for the scheduling of hour examinations. The way in which these aims have been accomplished is clear from the completed diagram, and from the following summary of the features of the schedule:

(1) The completed diagram shows one change which was voted by the Faculty, to emphasize the possibility of an instructor using two two-hour periods rather than four one-hour periods. Although this can be done in the morning, it seems particularly suitable for afternoon hours, and is so indicated: The designations A and B in the diagram indicate that two-hour classes could be scheduled on Monday and Thursday, or on Tuesday and Friday. This does not mean that no one-hour classes may be scheduled at 1:00 or at 2:00; in fact, some sections of multiple-section courses will doubtless be held at these hours.

M	T	W	T	F	S
8x	8	8	9x	8	8
Chapel	9	9	Chapel	9	9
10	I&C G I	10	10	10x	10
11	Chapel	11	11	Chapel	11
12	12x	12	12	11x	12
A(1)	B(1)	ROTC DRILL	A(1)	B(1)	
A(2)	B(2)		A(2)	B(2)	

(2) Each class sequence meets on four days a week at the same hour -- the first from 8:00 to 8:50, the second from 9:00 to 9:50, and so on through 2:50.

(3) Each morning class sequence is provided with an extra hour (marked by an "x" in the diagram - "x" for "extra"), which is available to the instructor in any week in which he plans an hour examination, either for the examination itself, or for a class meeting to replace a regular class hour used for the examination. Some course-wide examinations will still be given in late afternoon and early evening hours, but these must of necessity be very limited in number.

(4) Class sequences 8 and 9 (or 11 and 12, or 1 and 2) may be paired to provide two-hour periods for courses needing them.

(5) The seven class sequences pass through four cycles each week. The first cycle is completed at 10:00 Tuesday, the second at 1:00 Wednesday, the third at 10:00 Friday, the fourth at 1:00 Saturday. The second half-week is essentially a carbon copy of the first.

(6) The fact that each cycle begins as late as 10:00 A.M. provides ample opportunity for a convocation when a new term opens on Monday, Tuesday, Thursday, or Friday. The absence of regularly scheduled class sequence meetings before 10:00 on Mondays may be helpful to students returning from weekends, since much of the driving can be done after a night's sleep. This does not mean that the 8 o'clock period on Monday will never be used, for some discussion and laboratory sections can make use of that hour. When an athletic holiday (including Carnival) is declared, all 4th cycle classes can be cancelled, with classes ending at 10:00 on Friday.

(7) The second period on Mondays and Thursdays, and the fourth on Tuesdays and Fridays, are designated as Chapel periods, and no college engagements will be scheduled for these hours. The reduction from six to four chapel periods per week is partially compensated for by the greater length of each period, which will provide a more relaxed atmosphere for services than the present split-second timing necessary to sandwich the service into a more limited period. Even with seven class sequences, normal class hours are then over at 2:50 P.M., half an hour earlier than at present.

(8) The fact that all morning class sequences include Saturday will contribute to making Saturday classes a more significant part of the college week. This factor of increased protection for weekend classes is a very vital one if present hopes for greater integration of academic and extracurricular activities are to be realized. At the same time it is clear that these provisions will not have the effect of insuring that all students have Saturday classes. There will still be a considerable number whose election of afternoon classes, and of seminar, conference, and thesis courses, will free them from Saturday morning obligations, and this is as it should be when legitimate educational considerations are involved.

(9) Within the limits of lecture room availability, large lecture courses will be encouraged to schedule their lectures in the third morning period, and other courses will normally be scheduled then only when they are also scheduled at other hour

(10) In the final week of the spring term, a five-day week will be used, in order that the examination period may be completed by mid-afternoon the following Wednesday, to facilitate preparations for Commencement. This is accomplished by holding all third cycle classes on Thursday and all fourth cycle classes on Friday, omitting Thursday and Friday chapel periods. The same device can be used by vote of the Committee on Administration to provide a Saturday free of classes on Green Key weekend (or other appropriate weekend) without losing class meetings; but this should be avoided in a week occurring exactly at mid-term, for it would hamper the scheduling of hour examinations by eliminating "x" periods.

(11) The frequency of class meetings is spread evenly through the week.

(12) The period for ROTC drill has been placed on Wednesday afternoon, instead of on Monday afternoon as at present, thus allowing better spreading of the afternoon class sequences over the week, and preserving the similar structural pattern of the first and second half-weeks.

Transition Degree Requirements

I should like to take this opportunity to give information on provisions for making the transition from the present curriculum to the new one. The details of the new educational program will be given in a special issue of the "Regulations and Courses" pamphlet to be available in April, when continuing students will be electing courses for next fall. As a point of reference, however, I should like to quote briefly from the statement of requirements for the Bachelor's Degree:

> For the Bachelor's Degree a student must complete satisfactorily 36 term-courses (38 for ROTC students), and must also take (a) Great Issues, which meets twice weekly throughout the senior year and is the equivalent of a term-course, and (b) The Individual and the College, an orientation program which meets twice weekly during the first term of the freshman year. At least sixteen term-courses must be passed with grades of C plus or better. A student who fails Great Issues must have credit for an additional term-course to qualify for graduation. A student may not enroll for less than three term-courses in any one term without special permission.

It should be noted that the unit of credit under the new program is the course, not the semester-hour. With this in mind, students will wish to know how their own particular requirements are affected by the transition. The special committee entrusted by the Faculty with the duty of arranging these details has reported to the Executive Committee of the Faculty the following modifications of requirements for classes now in college who will still be enrolled next fall.

Class of 1959 (or any earlier class for graduation in June 1959)

> Old requirements, with new term-courses counting same as corresponding semester-courses under old system. (New sciences courses not comparable to old courses may be counted for four hours if Department so indicates.)

Class of 1960 (or any earlier class, if two years under new plan are required)

> Old requirements reduced by three semester-hours, with new term-courses counting same as corresponding semester-courses under old system. No reduction in the requirement of 43 hours of C plus quality or better.

Class of 1961 (or any earlier class, if three years under new plan are required)

> New requirements, increased by one term-course for non-ROTC students. For ROTC students, new requirements as stated.

Off-phase students

> These men should consult with the Dean, who will arrange adjustments consistent with the above. Specifically, for men wishing to graduate in December 1958, the Dean will apply the following rule:
>
> A student who passes eleven courses in the academic year 1957-58, and who passes three courses in the fall term of 1958, shall be recommended for graduation in December 1958 if he has a deficit of not more than three semester-hours below his normal requirement for graduation. (The word "course" is interpreted to mean one which normally carries three or four hours credit.)

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